

IN THE CLAIMS

Please cancel claims 1-22 without prejudice or disclaimer, and substitute new claims 23-44 therefor as follows:

Claims 1-22 (Cancelled).

23. (New) A method for simulating communication networks by means of an object based architecture in which each object represents a device of the network, the simulated network being capable of corresponding to a plurality of different systems, comprising the step of subdividing the physical devices of the network, for simulation purposes, into:

a first set of devices completely independent of the system that regulates the operation of the network, the operation of the devices of said first set thus being independent of said system;

a second set of devices which depend on the system under consideration, the operation of the devices in said second set thus being specific for the system under consideration; and

a third set of devices for the inter-work between said first set and said second set, the devices of said third set being able to interact with said devices independent of the system under consideration and with said devices which depend on the system under consideration.

said sets of devices defining a simulation architecture which is capable of allowing the simulation of a network operating according to said plurality of systems.

24. (New) The method as claimed in claim 23, comprising the step of providing in said second set, mobile terminal devices, each having an architecture that is characteristic of the individual system.

25. (New) The method as claimed in claim 23, comprising the step of providing fixed network devices in said first set.

26. (New) The method as claimed in claim 23, comprising the step of providing physical devices of the core network of a mobile communication network in said third set.

27. (New) The method as claimed in claim 23, comprising the step of providing physical devices of the access network relating to said communication network in said second set.

28. (New) The method as claimed in claim 24, wherein said mobile terminal devices comprise a part that is common to all the systems of said plurality and a part that is specific for a respective system under consideration.

29. (New) The method as claimed in claim 24, comprising the step of modelling said mobile terminal devices as a grouping of modules simulating the behaviour of different real protocols by means of:

a set of application modules, common to all the systems of said plurality, access modules, specific of the system under consideration, and modules which are common to all the systems of said plurality but with partly different operation according to the related system.

30. (New) The method as claimed in claim 29, comprising the steps of:

including physical devices of the so-called core network of a mobile communication network in said third set; and

configuring the set of said application modules and of said core network modules in a mobile unit.

31. (New) The method as claimed in claim 30 comprising the step of configuring said mobile terminal devices as constituted by the composition of said mobile unit and of specific access modules of the system under consideration.

32. (New) The method as claimed in claim 29, comprising at least one of the steps of the group:

making the application modules of said mobile terminal devices communicate with the modules present in the devices of said first set;

making the modules present in the devices of said third set communicate with the homologous modules present in said mobile terminal devices; and

making radio access modules of said mobile terminal devices communicate with the modules present in the devices of said second set.

33. (New) A simulator for simulating communication networks by means of an object based architecture in which each object represents a device of the network, the simulated network being capable of corresponding to a plurality of different systems, comprising:

a first set of devices completely independent of the system that regulates the operation of the network, the operation of the devices of said first set thus being independent of said system;

a second set of devices which depend on the system under consideration, the operation of the devices in said second set thus being specific for the system under consideration; and

a third set of devices for the inter-work between said first set and said second set, the devices of said third set being able to interact with said devices independent of the system under consideration and with said devices which depend on the system under consideration,

said sets of devices defining a simulator architecture which is capable of allowing the simulation of a network operating according to said plurality of systems.

34. (New) The simulator as claimed in claim 33, wherein said second set comprises mobile terminal devices, each having a characteristic architecture of the individual system.

35. (New) The simulator as claimed in claim 33, wherein said first set comprises fixed network devices.

36. (New) The simulator as claimed in claim 33, wherein said third set comprises physical devices of the core network of a mobile communication network.

37. (New) The simulator as claimed in claim 33, wherein said second set comprises physical devices of the access network relating to said communication network.

38. (New) The simulator as claimed in claim 34, wherein said mobile terminal devices comprise a part that is common to all the systems of said plurality and a part that is specific of a respective system under consideration.

39. (New) The simulator as claimed in claim 34, wherein said mobile terminal devices are configured as a grouping of modules simulating the behaviour of different real protocols comprising:

a set of application modules, common to all the systems of said plurality,
access modules specific of the system under consideration, and
modules which are common to all the systems of said plurality but with partly different operation according to the related system.

40. (New) The simulator as claimed in claim 39, wherein:

said third set comprises physical devices of the so-called core network of a mobile communication network, and

the set of said application modules and of said core network modules is configured as a mobile unit.

41. (New) The simulator as claimed in claim 40, wherein said mobile terminal devices comprise the composition of said mobile unit and of specific access modules of the system under consideration.

42. (New) The simulator as claimed in claim 39, wherein communications are allowed according to at least one of the operations of the group:

making the application modules of said mobile terminal devices communicate with the modules present in the devices of said first set;

making the modules present in the devices of said third set communicate with the homologous modules present in said mobile terminal devices; and

making radio access modules of said mobile terminal devices
communicate with the modules present in the devices of said second set.

43. (New) A communication network resulting from the application of the
method as claimed in claim 23.

44. (New) A computer program product capable of being loaded in the
memory of at least an electronic computer and comprising portions of software code
capable of implementing the method as claimed in claim 23.